

REMARKS

As a first preliminary matter, the Office Action states that it was responsive to a communication filed November 25, 2002. That communication corresponds to an Amendment and Reply filed on November 18, 2002. Please note that applicants also filed a Further Amendment and Reply, which was hand-delivered and received by the Technology Center on December 2, 2002. Applicants respectfully request that the Examiner also acknowledge receipt of such Further Amendment.

As a second preliminary matter, applicants note the Examiner's acknowledgment of applicants' Terminal Disclaimer, and that it overcame the rejection of claims 1-19, 20-32, and 34-39, as set forth on page 6 of the Office Action.

Reconsideration and further examination of the subject patent application in light of the present Amendment and Remarks is respectfully requested. Claims 1-72 are currently pending in the application and claims 1-39 are allowed. Claims 40-42, 44-48, 50, 51, 57, 58, 62, 66, and 68-72 stand rejected, claims 43, 49, 52, 56, 59-61, 63-65, and 67 are objected to, and claims 71 and 72 have been canceled by this amendment.

Rejection Under 35 U.S.C. §102

Claims 40-42, 44-48 and 50 stand rejected under 35 U.S.C. §102(b) as being anticipated by Furukawa, as set forth on pages 2-3 of the Office Action. In view of the claims as presently amended, applicants respectfully traverse this rejection.

Applicants' invention, as recited in independent claim 40, contains various features not disclosed in the Furukawa reference. First, applicants' invention is a line hanger composed of resilient material. In contrast, Furukawa is not a line hanger but rather, is merely an articulated retainer for a

cable made of individual chain links. The chain links are stiff and quite solid, and are not flexible. Although individual chain links may pivot relative to an adjacent chain link, there is nothing resilient about the individual links (which allegedly correspond to the claimed hanger).

Second, claim 40 recites that the distal ends of the arms lock into a common opening. This is clearly shown in the drawings and supported in the specification. This feature is completely missing in Furukawa. In fact, the chain cable retainer of Furukawa is not stackable at all, and no portion of the retainer can stack onto another retainer. Only additional links can be joined together, like the chain of a bicycle. No common opening exists in the Furukawa device, and there is no structure in Furukawa capable of locking into such a common opening.

Third, claim 40 now recites that the stacking provision is located in a region where the arms are joined, which feature is completely missing in Furukawa. The stacking provision in applicants' claimed invention may be the aperture disposed in the top portion of the hanger at the junction of the two arms. Furukawa has no such provision, and even lacks the two arms of applicants' claimed invention.

Because at least one significant element of applicants' claimed invention is missing from the chain cable hanger of Furukawa, Furukawa cannot anticipate applicants' claimed invention. Accordingly, applicants assert that independent claim 40 and dependent claims 41-42, 44-48 and 50 are allowable over Furukawa.

Claims 62, 66, 68, and 69 stand rejected under 35 U.S.C. §102(b) as being anticipated by Veghte, as set forth on page 3 of the Office Action. In view of the claims as presently amended, applicants respectfully traverse this rejection.

Applicants' invention, as recited in independent claim 62, contains features not disclosed in

Veghte. Independent claim 62 recites that each of the hanger arms have rigid means structured to abut an opposite surface of the edge from that engaged by a barb and create a fixed pivot point or line for the hanger when side loaded. This is significant because the rigid means, which may be viewed as the out-turned flanges 17a in Figs 12 and 13, like the “outriggers” on a truck-mounted crane, act like a brace on the attachment surface to fortify the hanger against side loading, typically due to wind force. Also, the out-turned flanges 17a along with in-turned flanges 19a on the first and second legs 17, 19 create a wider “footprint” on the attachment surface. The wider “footprint” decreases the likelihood of the attachment section 106 disengaging from the attachment surface during high winds by creating a pivot point about the rigid means 17a, as is best shown in Fig 13. Of course, little actual pivoting or sideways movement occurs because the locking barbs 22 prevent release of the hanger. In other words, if side loading force is applied to the hanger in the direction of the rigid means 17a, the rigid means is pressed with greater force against the attachment surface, while a “pulling” force is simultaneously applied to the locking barb on the opposite side. Clearly, without the rigid means to reduce or eliminate side movement of the hanger, the hanger could more easily release from the attachment surface.

Turning now to the Veghte reference, Veghte discloses a cable retaining clamp having locking members 32, 34 that pass through an aperture 8 when the clamp 10 is mounted to a tower. Flexible curved supporting members 26 extend from each arm 16, 18. However, the supporting members, being clearly curved, thus will flex or bend as the clamp is side loaded. Such supporting members are not rigid and are not designed to create a fixed pivot point. As greater force is applied, the supporting members will bend further, and the point where the underside of the supporting member contacts the horizontal beam 5 may slide outwardly, causing the hanger to release and the line to fall. In any event,

the supporting members act more like springs and do not create a fixed pivot point. Because the supporting members in Veghte flex and bend, the clamp is permitted to move sideways during side loading, thus increasing the likelihood of the clamp releasing from the horizontal beam. Veghte employs a completely different design approach, and does not disclose a rigid means that creates a fixed pivot point as in applicants' novel approach described in the rejected claims.

Because at least one significant element of applicants' claimed invention is missing from the chain cable hanger of Veghte, Veghte cannot anticipate applicants' claimed invention. Accordingly, applicants assert that independent claim 62 and claims 66, 68, and 69 depending therefrom are allowable over Veghte.

Claims 70 and 71 stand rejected under 35 U.S.C. §102(b) as being anticipated by Heath, as set forth on page 3 of the Office Action. In view of claim 70 as presently amended, applicants respectfully traverse this rejection. Note that claim 71 has been cancelled by the subject Amendment and Reply, while independent claim 70 has been amended to recite that the extension section substantially increases a length of the leg and flexes during insertion to decrease an insertion force required to insert the hanger into said opening.

Applicants' claimed invention, as recited in independent claim 70, includes an extension section, which is formed between the cable retention section and the distal (or barbed) ends. The extension section increases the effective length of the arms and thus reduces that amount of pinching or finger force that must be applied to the arms to cause the barbed end to compress sufficiently to permit the barbs to be inserted into the opening.

In contrast, Heath does not include any such intermediate or extension section. In Heath, the cable retaining loop 1 is connected directly to the lugs 5. Because the loop is a simple curve, absent

an extension section, is does not flex more than the ability of the loop itself to flex. Thus, the amount of force applied to the loop in Heath to cause the lugs to be urged toward each other is greater than the force needed in applicants' claimed invention, due to the inclusion of the extension section.

Because at least one significant element of applicants' claimed invention is missing from the clip of Heath, Heath cannot anticipate applicants' claimed invention. Accordingly, applicants assert that independent claim 70 is allowable over Heath.

Rejection Under 35 U.S.C. §103

Claims 51, 57, and 58 stand rejected under 35 U.S.C. §103 as being unpatentable over Veghte in view of Meehan, as set forth on page 4 of the Office Action. In view of the claims as presently amended, applicants respectfully traverse this rejection.

Independent claim 51 recites that distal ends of arms each have a barb having an edge-engaging surface, which is serrated or notched. The serration or notches help grip or dig into the attachment surface to further secure the line hanger to the edge of the opening of the line support or attachment surface. In applicants' invention, such serrated or notched portion is part of the barb, which helps grip and retain the entire line hanger to the attachment surface.

Further, applicants' line hanger has two opposing curved members 12 and 13 that accommodate and grip the transmission line, and additionally have spring fingers 29 provide spring resistance against the transmission line after it is inserted in the hanger to help minimize the longitudinal movement of the transmission line in the hanger even on smooth (non-corrugated) transmission lines. It is significant that the curved members and the spring fingers are not concerned with attachment of the hanger to the support surface and are not structurally associated with the barbs. Rather, they only relate to gripping the transmission line.

The Examiner states in the Office Action that it would be obvious to modify the barb edge of Veghte to incorporate the serrated surface of Meehan to arrive at applicants' claimed invention. However, such a combination does not produce applicants' claimed invention. First, the notched surface 66 of Meehan grips the cable 64, and has nothing whatsoever to do with the locking members of Veghte, nor does it have anything to do with securing the actual bracket to its attachment point. The notches in Meehan are only concerned with cable gripping, which could be analogous in function to the curved members and spring fingers 29 of applicants' invention.

There is no suggestion or motivation to use the notched cable retaining teeth 66, 68 with the locking members of Veghte because the notches or teeth in Meehan are totally unrelated to the locking members of Veghte, and thus there is no reason to consult Meehan or make the combination suggested by the Examiner. Then notches or teeth in Meehan only relate to gripping the cable and do not relate in any way to securing the bracket to its attachment surface. The Examiner's proposed combination would be similar to a situation where the claims were rejected based on the combination of the locking members of Veghte with teeth of a serrated knife. The teeth of a hypothetical serrated knife reference have about as much relevance to applicants' claimed invention as does the Meehan. Thus, there is no suggestion or motivation to make the combination suggested by the Examiner. Such a combination of features would constitute impermissible reconstruction of applicants' invention using hindsight by picking and choosing features from references absent a suggestion or motivation to do so.

Further, the feature of the edge engaging surface recited in claim 51, which the Examiner rejects, is similarly recited in independent claim 34, which has been correctly allowed by the Examiner. It would appear to be inconsistent to reject independent claim 51 while correctly allowing independent claim 34. Accordingly, applicants respectfully submit that independent claim 51 is not

unpatentable over the cited combination of Veghte and Meehan.

Turning now to independent claim 57, applicants apply the above arguments addressing the rejection of independent claim 57 as they do in addressing the rejection of claim 62 under § 102 with respect to Veghte. Namely, that applicants' claimed invention has out-turned flanges, which are rigid, while Veghte have curved support members that flex and may slide.

To reiterate, claim 57 recites an outwardly extending brace which abuts an opposite surface of the edge from that engaged by the barb, which includes the out-turned flanges 17a in Figs 12 and 13. The out-turned flanges act like a brace on the attachment surface if the hanger sways due to wind loading, and which flanges help to create a wider "footprint" on the attachment surface. Again, applicants' outwardly extending brace is rigid whereas the support members 26 of Veghte are curved and do not operate in the same way like outriggers to counteract side loading.

Applicants do not understand how the Examiner combines the two references to arrive at applicants' invention. There is no suggestion or motivation to combine the curved support members of Veghte with the notches disposed on the cable gripping structure of Meehan to arrive at applicants' claimed invention of a line hanger having rigid outwardly extending braces. Meehan adds nothing to the combination because claim 57 does not even recite the structure of the barb having an edge-engaging surface, as does claim 51. Thus, applicants respectfully submit that the combination suggested by the Examiner does not address the features recited by claim 57. Accordingly, applicants respectfully submit that independent claim 57 and claims depending therefrom are not unpatentable over the cited combination of Veghte and Meehan.

Closing Remarks

Applicants note the Examiner's statement that claims 1-39 are allowable over the art of


record. For the foregoing reasons, applicants submit that the subject application is in condition for allowance and earnestly solicits an early Notice of Allowance. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, the Examiner is respectfully requested to call the undersigned at the below-listed number.

The Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,

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